

Title (en)
Muffler

Title (de)
Schalldämpfer

Title (fr)
Silencieux

Publication
EP 1691050 B2 20111012 (DE)

Application
EP 05111847 A 20051208

Priority
DE 102005002290 A 20050117

Abstract (en)
[origin: EP1691050A1] The muffler has a housing (2) with an upper shell (5), a lower shell (6), an intake opening (3) and an exhaust opening (4). The intake opening that is formed in a base (9) is introduced between the upper and lower shells and forms an integral part of the housing. The exhaust opening that is formed in the lower shell is arranged along a dividing line (7), at which the shells are attached together. An independent claim is also included for a modular system for manufacturing a muffler.

IPC 8 full level
F01N 13/18 (2010.01)

IPC 8 main group level
F01N (2006.01)

CPC (source: EP)
F01N 13/18 (2013.01); **F01N 13/1872** (2013.01); **F01N 13/1888** (2013.01)

Citation (opposition)
Opponent :
US 6457555 B1 20021001 - SHAUGHNESSY STEPHEN JAMES [GB]

Cited by
EP2639423A1; DE102012204114A1; JP2013194736A; CN103410597A; DE102012204114B4; US8939254B2; EP2639423B1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1691050 A1 20060816; EP 1691050 B1 20070815; EP 1691050 B2 20111012; AT E370318 T1 20070915; DE 102005002290 A1 20060727; DE 502005001245 D1 20070927; ES 2290859 T3 20080216; ES 2290859 T5 20120125

DOCDB simple family (application)
EP 05111847 A 20051208; AT 05111847 T 20051208; DE 102005002290 A 20050117; DE 502005001245 T 20051208; ES 05111847 T 20051208